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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,720	12/21/2000	Greg Jones	40921/205585	7754

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EXAMINER

DENNISON, JERRY B

ART UNIT PAPER NUMBER

2143

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/742,720	Applicant(s) JONES ET AL.	
	Examiner J. Bret Dennison	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 7-10, 13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-10, 13, 15, and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Amendment (RCE) of Application Number 09/742720 received on 16 December 2004.
2. Claims 1, 2, 4, 7-10, 13, 15, and 16 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 7-10, 13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapoor et al. (U.S. Patent Number 5,682,534) in view of Lam et al. (U.S. Patent Number 5,926,636).

3. Regarding claims 1, 7, and 9, Kapoor discloses a system and method of interprocess communications between a client and a server each client and server having one or more Interprocess Communications Facilities which are sockets, and wherein each Interprocess Communications Facilities has connection oriented protocol (COP) associated therewith (Kapoor, col. 2, lines 53-57), comprising:

a server having server data and a server Interprocess Communications Facility which is a socket associated therewith, said server being configured for communicating with one or more clients having client data and a client Interprocess Communications

Art Unit: 2143

Facility which is a socket associated therewith (Kapoor, col. 2, lines 35-45, col. 4, lines 25-40, col. 5, lines 10-15, Kapoor teaches clients and servers configured for communicating with one or more clients or servers having data and using interprocess communication);

said server Interprocess Communications Facility and said client Interprocess Communications Facility being configured for forming a connection between said server Interprocess Communications Facility and said client Interprocess Communications Facility for delivering said server data and receiving said client data (Kapoor, col. 3, lines 15-20, Kapoor teaches establishing an interprocess communication path between clients and servers),

said connection having connection oriented protocol operatively associated therewith (col. 3, lines 15-17);

said server being programmed for detecting if said client is local or remote (Kapoor, col. 5, lines 10-15, col. 3, lines 10-20, Kapoor teaches that clients act as servers and servers act as clients and detection is made if client is local or remote);

said client being configured for detecting if said server is local or remote (Kapoor, col. 5, lines 10-15, col. 3, lines 10-20, Kapoor teaches that clients act as servers and servers act as clients and detection is made if server is local or remote);

said server being further configured to setting pointers to said client Interprocess Communications Facility if said client is local (Kapoor, col. 3, lines 14-17, Kapoor teaches setting vectors); and

Art Unit: 2143

said pointers being configured to form a direct connection between said server Interprocess Communications Facility and said client Interprocess Communications Facility for data exchange between said client and said server in a manner for bypassing said connection oriented protocol Kapoor, col. 3, lines 14-17, Kapoor teaches vectors including at least one binding handle having a protocol sequence that establishes an interprocess communication path between server and client processes); and

transferring data between said client and server (Kapoor, col. 3, lines 18-21, Kapoor teaches using the new communication path to transfer data).

Kapoor also teaches establishing communications between client and server between the session and transport layers (Kapoor, col. 1, lines 45-65), and using Unix Domain sockets (Kapoor, col. 2, lines 50-60). Kapoor also teaches automating the use of the local RPC mechanism when server and client processes are running on the same machine (Kapoor, col. 2, lines 60-62).

Kapoor does not explicitly state wherein the Interprocess Communication Facility is a Transport Layer Interface (TLI). However the Transport Layer Interface is the same communications layer that sits at the same level as BSD (Berkeley Software Distribution) Unix sockets.

Kapoor does not explicitly state wherein said server is further configured to determine if said server and said client Interprocess Communications Facilities within the same system are compatible; and if said server and said client Interprocess Communications Facilities are not compatible, transferring data between said client and

Art Unit: 2143

said server through a conventional connection oriented protocol connection. However, since Kapoor teaching automating the use of the local RPC mechanism, this would require checking that the interprocess communications facilities are compatible

In an analogous art of interprocess communication, Lam teaches a remote procedure call component management method that supports operations over a plurality of transport stacks that support TCP/IP, and that sockets and transport layer interface are interfaces between RPC and the various network transport stacks (Lam, col. 2, lines 25-30). Lam also determines if server and client formats are compatible (Lam, col. 6, lines 13-15) and if they are not compatible, converting the message to a compatible format (Lam, col. 6, lines 15-20).

Therefore it would have been obvious to one in the ordinary skill in the art at the time the invention was made to combine Kapoor with Lam to enable remote procedural calls to work properly in an environment with mixed versions of remote and local programming interfaces (Lam, col. 4, lines 35-40).

4. Regarding claims 2 and 10, Kapoor and Lam teach all of the limitations, substantially as claimed, as described in claims 1 and 9, including said server and said client being further configured for setting said pointers to null (Kapoor, cols 21-22, lines 20-25 and 33-37).

5. Regarding claim 4, Kapoor and Lam teach the limitations, substantially as claimed, as described in claim 1, including wherein said connection oriented protocol is

Art Unit: 2143

Transmission Control Protocol/Internet Protocol (TCP/IP) (Kapoor, col. 3, lines 48-53, Kapoor teaches a connection-oriented protocol "ncacn_ip_tcp").

6. Regarding claim 8, Kapoor and Lam teach the limitations, substantially as claimed, as described in claim 1, including verifying that said client and said server are prepared to set said pointers directly between said client and said server Interprocess Communications Facilities prior to setting said pointers; and when either said client or said server are not prepared to set said pointers directly between said client and said server Interprocess Communications Facilities, setting said pointers to null (Kapoor, col. 21, line 25 through col. 23, line 12); and transferring data between said client and said server via a conventional connection oriented protocol connection (Kapoor, col. 3, lines 48-53).

7. Regarding claim 13, Kapoor and Lam teach the limitations, substantially as claimed, as described in claims 1 and 9, including wherein said server is further configured for detecting errors in data transfer/connection (Kapoor, col. 12, lines 8-15); setting said pointers to null if errors are detected (Kapoor, cols 21-22 lines 15-40), and setting a conventional Interprocess Communications Facility connection using the connection oriented protocol (Kapoor, col. 3, lines 48-53).

8. Regarding claims 15 and 16, Kapoor and Lam teach the limitations, substantially as claimed, as described in claim 9, including wherein said server/client is further configured to verify that said client is prepared to transmit data via said pointers set

Art Unit: 2143

directly between said client and said server Interprocess Communications Facilities (Kapoor, col. 5, lines 10-15, and col. 21 line 25 through col. 23, line 11, Kapoor teaches checking for endpoints and if not given, creating one.).

Response to Amendment

9. Applicant's arguments and amendments filed on 16 December 2004 have been carefully considered but they are not deemed fully persuasive.

10. Applicant's arguments include the failure of previously applied art to expressly disclose the teachings "wherein the interprocess communications facilities are defined as being sockets having connection oriented protocol associated therewith". [see Applicant's Response, filed 16 December 2004, page 7 of 8]. Applicant's arguments also include the failure of previously applied art to expressly disclose the teachings "wherein data is transferred between the client and the server via conventional connection oriented protocol connection if the client interprocess connection facility, within the same facility, are not compatible" [see Applicant's Response, filed 16 December 2004, page 8 of 8].

11. It is evident from the mappings found in the above rejection that Kapoor discloses these limitations. Kapoor teaches that with the OSF DCE RPC mechanism, client and server processes each have sockets for use in the communication path between client and server. The path is defined using ip-based protocol sequences of the Internet Network Address Family to open the sockets. Kapoor also teaches that this

Art Unit: 2143

communication through TCP uses connection-oriented protocol sequences. Kapoor also teaches bypassing the network and transport layers and using an alternate protocol sequence that exploits local interprocess communication facilities. Kapoor also teaches that if any error occurred during the transmission or receiving, to use the original RPC and appear to be using the connection-oriented RPC protocol as shown on col. 11, lines 50-55 and col. 12, lines 9-15.

12. Further, it is clear from the numerous teachings (previously and currently cited) that the provision for using "sockets associated with connection oriented protocol" was widely implemented in the networking art.

13. Regarding the independent claims, Applicant only discloses a client and server having a connection oriented protocol, determining if the client and server are on the same system, and if they are, bypassing said connection oriented protocol to directly transfer the data between said client and server.

14. Kapoor teaches a client and server having a connection oriented protocol and if both client and server are on the same system, a binding handle vector is returned to the client process. The protocol sequence is then mapped to a second protocol sequence that establishes an interprocess communication path (Kapoor, see Abstract). This means that the connection-oriented protocol is bypassed, as in the Applicant's claimed invention.

15. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically

pointing out how the language of the claims patentably distinguishes them from the references.

16. Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not considered persuasive. It is also clear to the Examiner that Kapoor clearly teaches the independent claims of the Applicant's claimed invention.

17. Furthermore, as it is Applicant's right to continue to claim as broadly as possible their invention, it is also the Examiner's right to continue to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique. As it is extremely well known in the networking art as already shown by Kapoor, bypassing a connection oriented protocol for direct transfer of data is taught as well as other claimed features of Applicant's invention. By the rejection above, the applicant must submit amendments to the claims in order to distinguish over the prior art use in the rejection that discloses different features of Applicant's claimed invention.

18. It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

19. Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims

Art Unit: 2143

with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2143

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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